EFFICACY AND CARE CONTINUITY OF A PSYCHIATRIC GAP CARE CLINIC: A PROGRAM EVALUATION

LAURA SUMMERLIN, MSN, APRN, PMHNP-BC
DNP CANDIDATE

UVA | SCHOOL of NURSING

PROJECT TEAM

Advisor: Julie Roebuck, DNP, APRN, PMHCNS, PMHNP-BC

Second Reader: Beth Quatrara, DNP, APRN, CMSRN, ACNS-BC

Mentor: Anilla Del Fabbro, MD

INTRODUCTION & BACKGROUND

Virginia

Adults

- 264,000 diagnosed with serious mental illness (NAMI, 2021)
- 36.9% clinical anxiety or depression (NAMI, 2021)

Adolescents

- 37% of highschoolers clinical anxiety or depression & 10% considering suicide (VA School Survey, 2022)
- 55% of those highschoolers are not receiving mental health services (Mental Health America, 2022)

Additionally,

- Of 382,000 adults not receiving necessary mental health care, 41.7% did not due to cost
- Approximately 2 million live within community designated as mental health professional shortage area

INTRODUCTION & BACKGROUND

Virginia

- 7 times more likely to be forced out-of-network for mental health care vs primary care
- Issues with medication non-adherence & accessing psychiatric symptom management through emergency department-nationally “[t]he leading predictor of readmission was non-adherence with prescribed medications” (Owusu, 2022)
- September 2021 to July 2022: daily average of 33 adults & 10 children were on state hospital wait list
- Some released from emergency department without psychiatric treatment, despite deemed threat to self or others; temporary detaining order (TDO) expired before bed available

WHAT ARE CARE GAPS & GAP CLINICS

- Care gaps refer to disparities or deficiencies in healthcare delivery where patients do not receive appropriate or timely medical interventions, leading to suboptimal health outcomes
- Implications of care gaps are profound (worsened health conditions, increased healthcare costs, & diminished quality of life for patients)
- Psychiatric Gap Care Clinics are meant to provide aid & continuum of care, & allow time to establish outpatient services
- Gap Clinics focus on identifying & closing care gaps by providing comprehensive assessments, coordinating care, & offering targeted interventions

ADVANTAGES OF PROVIDING GAP CARE

- **Accessibility:** mental health care for individuals who may not require hospitalization but need more intensive support than outpatient services
- **Continuity of care**: bridge gap between inpatient & outpatient care, ensuring patients receive ongoing treatment & support during critical periods
- **Intensive support**: offers more intensive therapeutic interventions & monitoring than traditional outpatient services-crisis stabilization; multidisciplinary approach
- **Reduced stigma**: less restrictive environment than hospitals; helps reduce perception associated with psychiatric hospitalization

REVIEW OF THE LITERATURE QUESTION

What is the impact of psychiatric gap care clinics on readmission rates for psychiatric patients within 3 months of discharge from the emergency department or inpatient care?

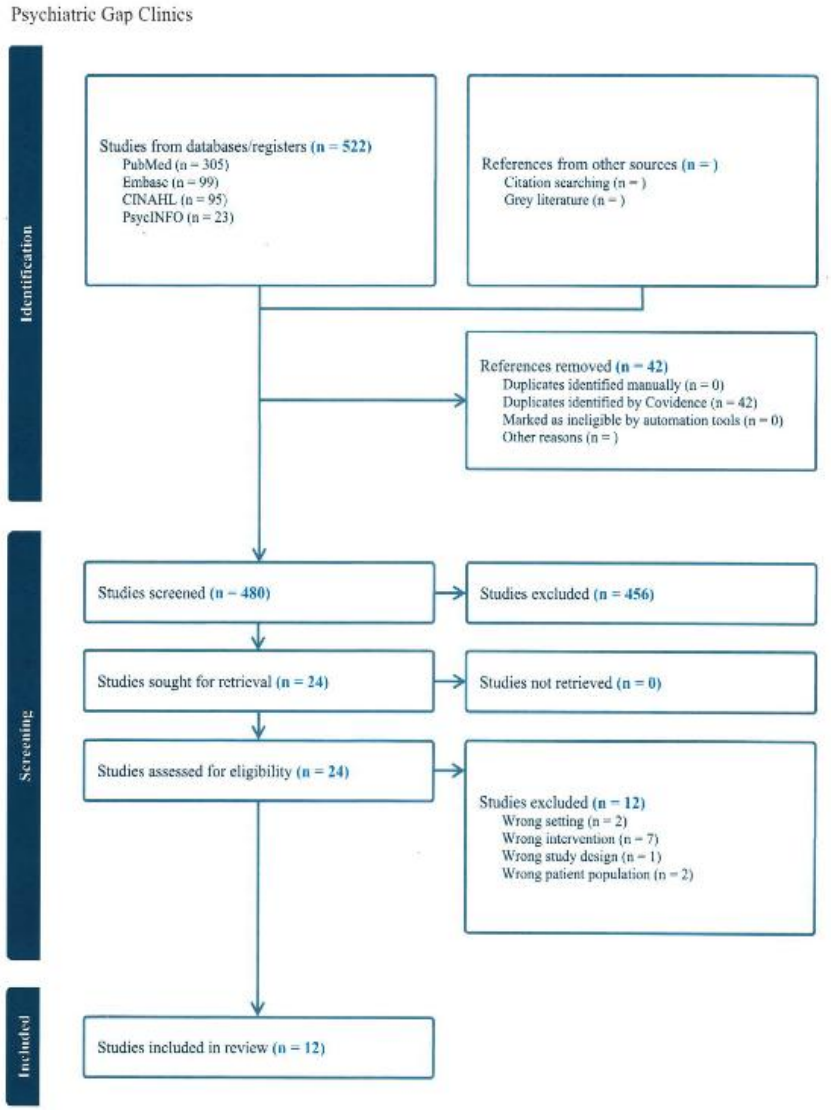


Figure 1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow

PRISMA DIAGRAM

THE LITERATURE

Summary

- Evidence supports psychiatric gap clinics for continuity of care & reduced readmission rates

Themes that emerged

- Prompt follow up & reduction in readmission rates
- Attendance for follow up appointments & improved outcomes
- Social determinants of health & how they affect adequate follow up

PURPOSE

Purpose of DNP scholarly project was to complete a program evaluation of an Academic Medical Center's (AMC) psychiatric gap care clinic to determine efficacy of clinic & identify areas of improvement moving forward

IMPLEMENTATION FRAMEWORK

CDC Framework for Program Evaluation

1. Engage Stakeholders
2. Describe the Program
3. Focus Evaluation Design
4. Gather Credible Evidence
5. Justify Conclusions
6. Endure Use and Share Lessons

(CDC, 1999)

STEP 1: ENGAGE STAKEHOLDERS

Persons & organizations with investment in evaluation findings & planning based on knowledge gained

- Gap care clinic providers (Director, NP & PA)
- Psychiatry department
- Hospital administration
- Health system
- Psychiatric patient population

STEP 2: DESCRIBE PROGRAM

- Need identified during COVID & formalized 1 year ago
- Gap Clinic initiative prompted by long wait list for outpatient psych & PCP services in effort to provide continuity of care & decrease hospital readmissions
- Intended focus on psychiatric patients discharged from EDs, inpatient, or clinical liaison (CL) services
- Providers: PA & NP; clinician services weekdays (Monday through Friday)
- Offers virtual or in-person appointments (consults with MD/Medical Director)
- Appointments scheduled prior to discharge-1st appointment within 7 days of discharge
- Up to 3 appointments within 3 months
- Medication management, referrals & questions until outpatient services established

STEP 3: FOCUS OF EVALUATION DESIGN

PURPOSE

- Evaluate the efficacy of a psychiatric Gap Clinic in reducing readmission rates

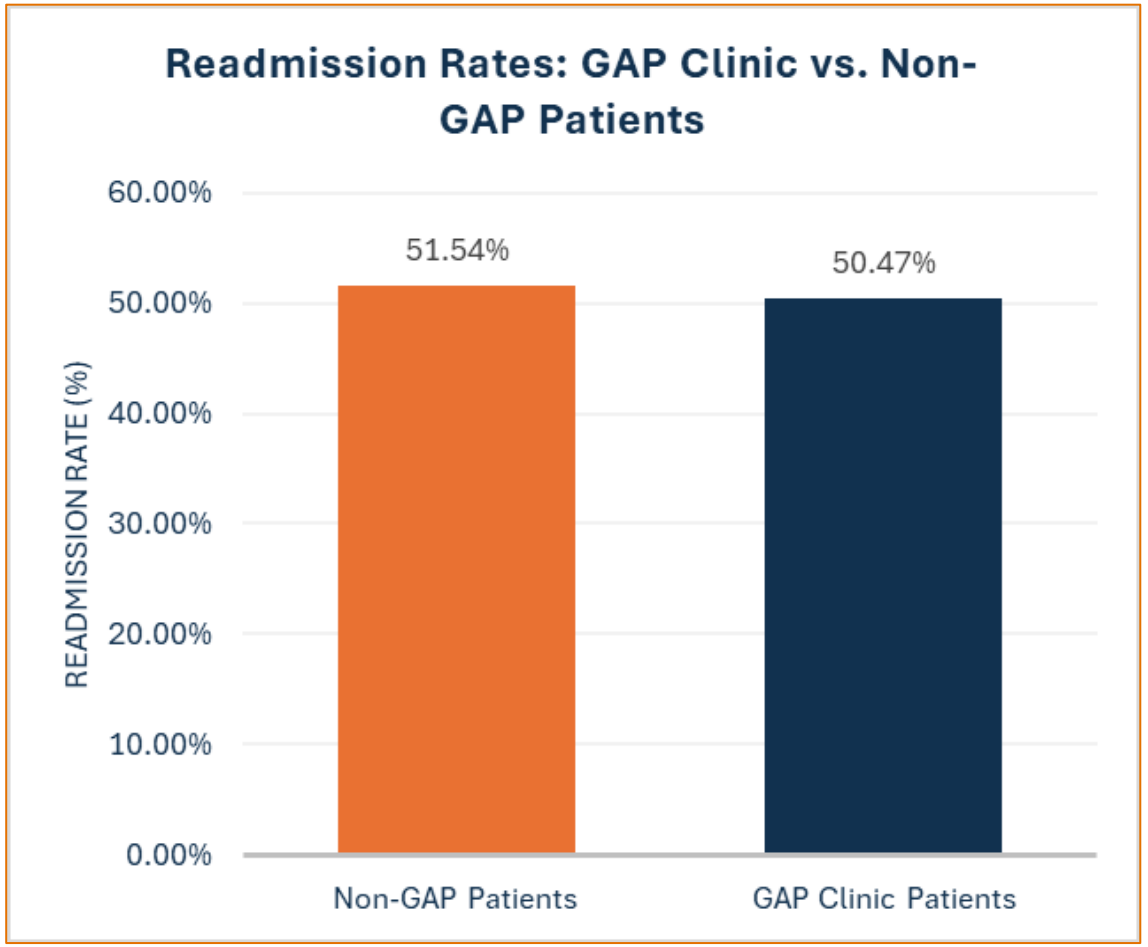
PRINCIPALS & GOALS

- Identify potential opportunities for future development
- Provide actionable recommendations that will enhance effectiveness & inclusivity
- Present evaluation process, outcomes, & recommendations to stakeholders

STEP 4: GATHER CREDIBLE EVIDENCE

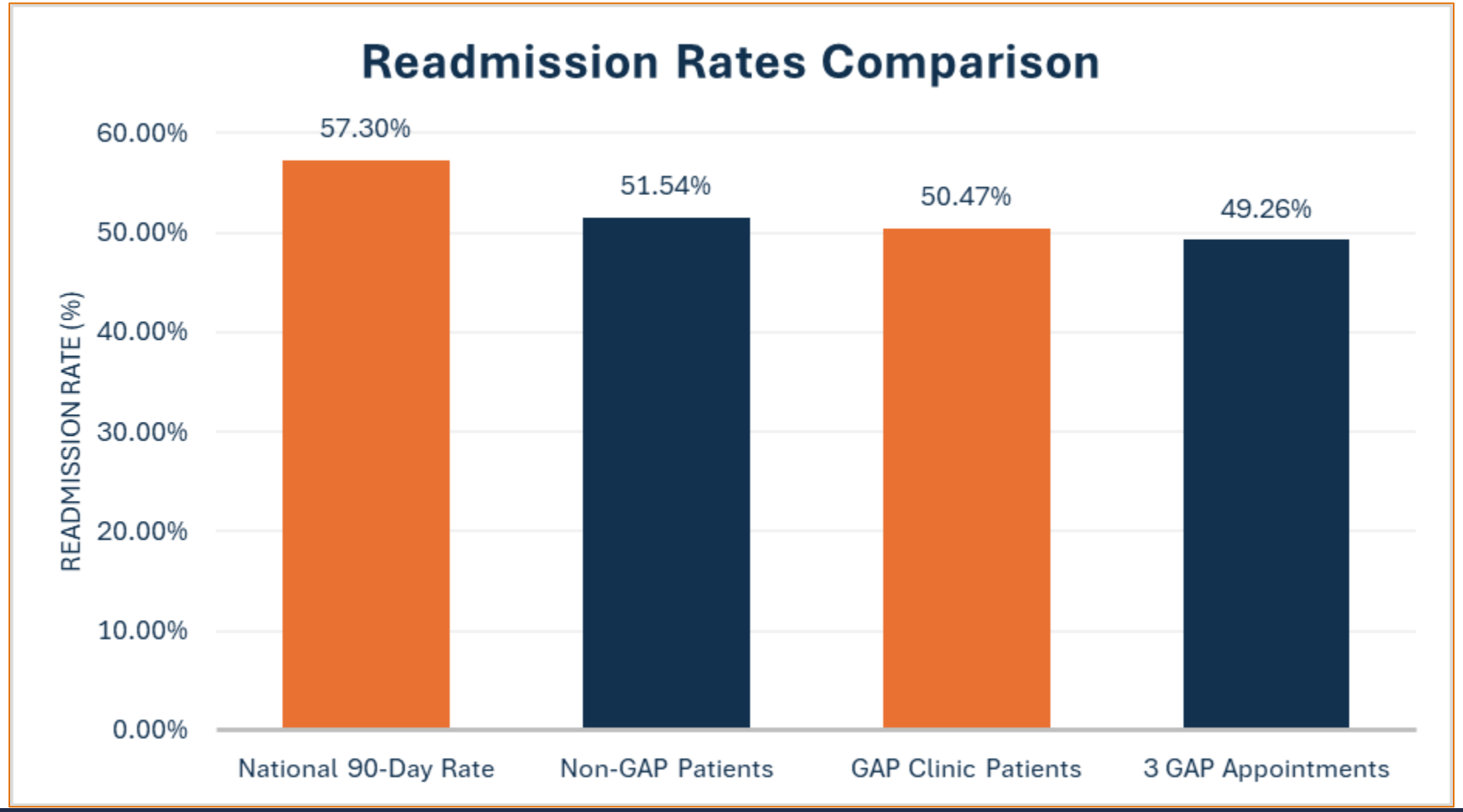
- Data collection with assistance of health system biostatistician & EMR (EPIC)
- Retrospective, non-aggregated data comparing patients referred to Gap Clinic versus those not referred & measure primary outcome of readmission rates of both groups
- Data collected from January 1, 2024-June 30, 2024 (one year after full clinic started)
- Additional data collected: in person vs virtual visits, no show appointments & demographics

TOTAL READMISSION RATES

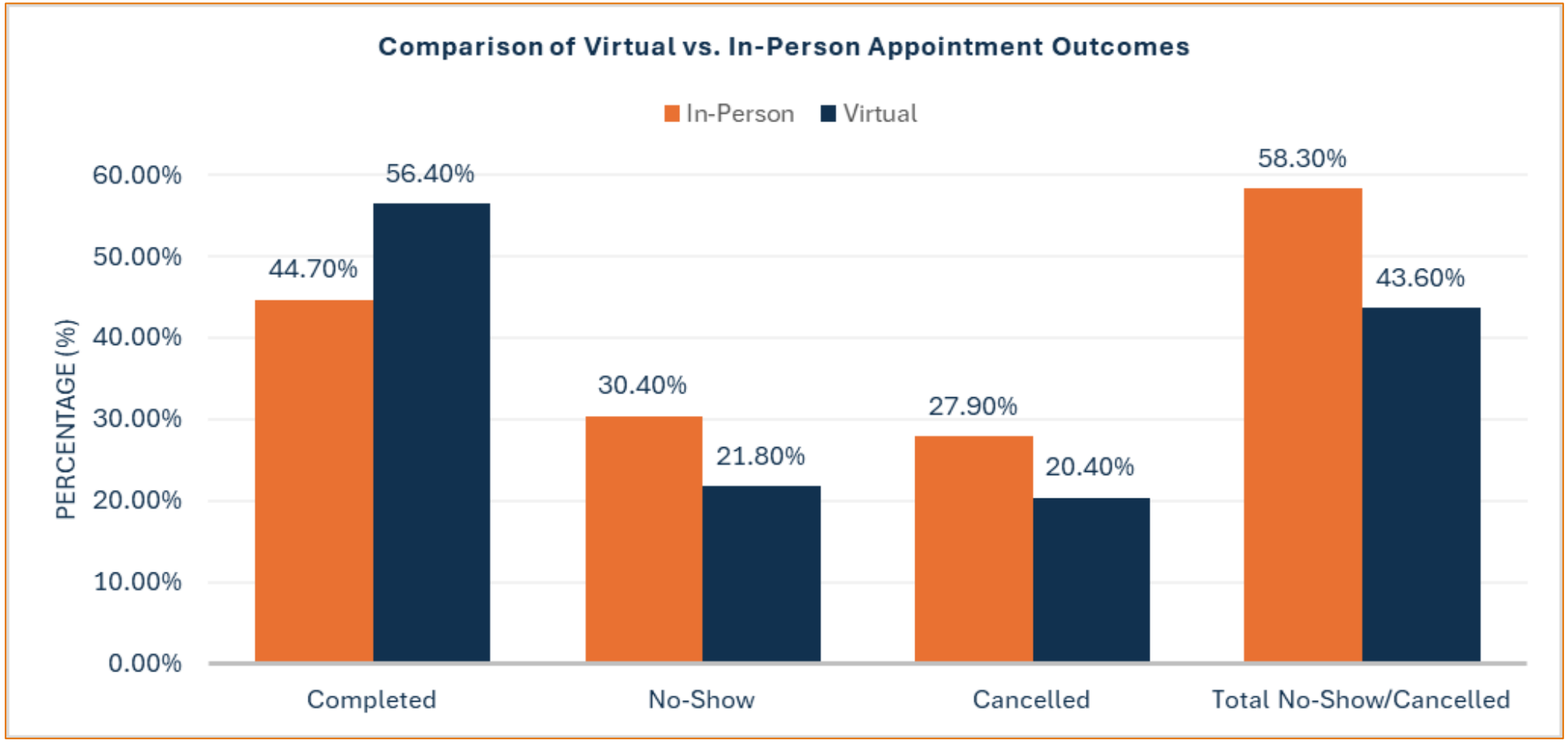


- GAP readmission rate: 50.47% (1,064 patients referred to clinic with 537 readmissions)
- Non-GAP readmission rate: 51.54% (2,797 discharged with 1,440 readmissions)
- There was a **1.07%** reduction in readmission rate for patients referred to Gap Clinic

READMISSION RATE COMPARISON



VIRTUAL VS IN-PERSON



DEMOGRAPHICS

Race/Ethnicity	Representation (%)	Regional Population (%)
White or Caucasian	79.7 (🔴)	75.0 (🔵)
Black or African American	13.8 (🔴)	13.0 (🔵)
Biracial	1.7 (🔴)	3.0 (🔵)
Hispanic	1.1 (🔴🔥)**	6.0 (🔵🔥)**
Other	2.3 (🔴)	1.0 (🔵)
Asian	1.3 (🔴)	2.0 (🔵)
American Indian/Alaska Native	0.1 (🔴)	0.0 (🔵)

STEP 5: CONCLUSIONS & RESULTS

- Readmission rate reduction of 1.07% for referred GAP patients
- Readmission rate lowest GAP patients completing all 3 appointments
- Overall cancellation rate was 24.4%; no show rate 27.1%
- More in person appointments (53.9%) vs via telehealth (46.1%)
- Increased adherence via telehealth appointments
- Ethnic groups equitably reflected with exception to Hispanic population (1.1% GAP vs 6% regional)

STEP 5: CONCLUSIONS-RECOMMENDATIONS

- Improve appointment attendance-transition Gap Clinic to hospital appointment reminder system
- Collaborate with social work regarding education to ensure appointments made & instructions / education provided re Gap Clinic logistics & services provided
- Assist with MyChart account PRIOR to discharge / at time appointment made (MyChart completed appointment rate **61.2%** vs **53.3%** for non-MyChart virtual appointments
- Improve transportation access; offer ride vouchers / link to Medicaid transport services
- Develop initiatives to engage Hispanic population for mental health awareness & GAP services provided

STEP 6: ENSURE USE & SHARE LESSONS

Timeline

March 2025

- Formally present DNP Final Defense
- Poster presentation at Virgina Council of Nurse Practitioners Annual Conference (Norfolk, VA)

April 2025

- Present to stakeholders
- Submission to UVA libra database

May 2025

- Follow up with Gap Clinic
- Submit to the American Journal of Psychiatric Nursing

STRATEGIC PLANNING: FINANCIAL CONSIDERATIONS

Costs

- Facility overhead & staff compensation (addition of PMHNPs & social worker for appts/education)
- Transportation vouchers
- Community education initiatives

Potential Savings & Benefits

- $1200.00 / day average inpatient psychiatric admission (7-day average length of stay)
- $520.00 average psychiatric emergency room visit
- $83.00-$116.00 average cost of psychiatric outpatient visit

EQUITY, INCLUSION & ETHICAL CONSIDERATIONS

Equity and Inclusion

- All patients are included regardless of age, gender, ethnicity & race
- Financial means not a consideration nor barrier to treatment

Ethical Principles

- Autonomy-respect for individual choices & needs (informed consent, shared decision making, privacy and confidentiality)
- Beneficence-promotes health & well-being (acts in patient's best interest to prevent deterioration & readmission, provides timely access for stabilization during a critical transition period)
- Non-Maleficence-the obligation not to inflict harm (avoids potential relapse, suicide risk, medication nonadherence & ensures proper risk assessment/intervention to prevent harm)

IMPLICATIONS

Nursing Implications

- **Enhancing Continuity of Care**: Improve the standard of care for psychiatric patients by bridging gaps in treatment, particularly in resource-limited settings.
- **Improving Patient Outcomes**: Reduce symptom severity and prevent crises through effective medication management & psychosocial support, improving overall well-being & quality of life
- **Alleviating System Strain**: Decrease emergency department (ED) congestion and inpatient psychiatric bed shortages by reducing readmissions & ensuring timely follow-up care.

Sustainability

- **Addressing Regional Mental Health Needs**: As a large teaching hospital, provide essential mental health services in an area facing accessibility & treatment shortages
- **Enhancing System Reputation & Patient Preference**: Position the hospital as the preferred choice for psychiatric care, fostering patient trust & long-term engagement
- **Data-Driven Service Improvement**: Leverage data analysis & patient outcomes to continuously refine clinic operations & ensure services align with community mental health

“AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE”

BENJAMIN FRANKLIN, 1735

UVA | SCHOOL of NURSING


Q
QUESTIONS?

REFERENCES

- Agency for Healthcare Research and Quality. (2023). *National Healthcare Quality and Disparities Report*. https://www.ahrq.gov/research/findings/nhqrdr/nhqdr22/index.html
- CDC Evaluation Working Group. (n.d.). *Centers for Disease Control and Prevention. Framework for program evaluation in public health* (MMWR 1999; 48(No. RR-11): 1-42).
- Department of Medical Assistance Services (December 2023. Virginia.Gov). Behavioral Health Service Rate Updates Effective January 1, 2024. Https://dmas
- Karaca Z (AHRQ), Moore BJ (IBM Watson Health). Costs of emergency department visits for mental and substance use disorders in the United States, 2017. HCUP Statistical Brief #257. May 2020. Agency for Healthcare Research and Quality, Rockville, MD. https://www.hcup-us.ahrq.gov/reports/statbriefs/sb257-ed-costs-mental-substance-use-disorders-2017.pdf
- *Mental Health in Virginia*. (2021, February 1). Nami.Org. Retrieved June 19, 2023, from https://nami.org/NAMI/media/statefactsheets/virginastate

REFERENCES

- Mongelli F, Georgakopoulos P, Pato MT. Challenges and opportunities to meet the mental health needs of underserved and disenfranchised populations in the United States. Focus (Am Psychiatry Publ). 2020 Jan;18(1):16-24. doi: 10.1176/appi.focus.20190028. Epub 2020 Jan 24. PMID: 32047393; PMCID: PMC7011222.

- Owusu E, Oluwasina F, Nkire N, Lawal MA, Agyapong VIO. Readmission of Patients to Acute Psychiatric Hospitals: Influential Factors and Interventions to Reduce Psychiatric Readmission Rates. Healthcare (Basel). 2022 Sep 19;10(9):1808. doi: 10.3390/healthcare10091808. PMID: 36141418; PMCID: PMC9498532.

- Purnell, T. S., Calhoun, E. A., Golden, S. H., Halladay, J. R., Krok-Schoen, J. L., Appelhans, B. M., & Cooper, L. A. (2016). Achieving health equity: Closing the gaps in health care disparities, interventions, and research. *Health Affairs*, *35*(8), 1410–1415. https://doi.org/10.1377/hlthaff.2016.0158

- Reinhart, M. (2023, January 30). *The State of Mental Health in America*. Mhanational.Org. Retrieved June 27, 2023, from https://mhanational.org/issues/2023/mental-health-america-access-care-data

REFERENCES

- Smith, T. E., Haselden, M., Corbeil, T., Tang, F., Radigan, M., Essock, S. M., Wall, M. M., Dixon, L. B., Wang, R., Frimpong, E., Lamberti, S., Schneider, M., & Olfson, M. (2020). Relationship between continuity of care and discharge planning after hospital psychiatric admission. *Psychiatric Services*, *71*(1). https://doi.org/10.1176/appi.ps.201900233

- US Department of Veteran's Affairs (2024). HERC Inpatient Average Cost Data. https://www.herc.research.va.gov

- U.S. Census Bureau (2023). *American Community Survey 1-year Estimates*. Retrieved from *Census Reporter Profile Page for Roanoke, VA Metro Area* http://censusreporter.org/profiles/31000US40220-roanoke-va-metro-area/